



Center for Vitamins and Cancer Research

University of Colorado Health Sciences Center
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Dr. Sheldon C. Sommers
110 E. 59th Street
New York, New York 10022

Dear Dr. Sommers,

Dr. Barry Pierce suggests that I contact you regarding the possibility of providing financial support for our basic research on the role of vitamins, in the prevention and the treatment of cancer. We have made several new and original observations on the modification of the response of tumor cells in culture by vitamin E. For example, vitamin E inhibits the growth and/or causes morphological differentiation of several types of tumor cells in culture. Vitamin E enhances the effect of chemotherapeutic agents, ionizing radiation and hyperthermia on tumor cells. Vitamin E - resistant cells exist in cell culture. We propose to generate and isolate vitamin E - resistant mutant clones in order to study the mechanisms of vitamins - effect and in order to identify other physiological substances (cAMP, butyric acid, vitamin A, vitamin C) which may inhibit the growth and/or induce differentiation in vitamin E - resistant tumor cells.

Vitamins (A,C and E) may have a role in the prevention of tumor by the following mechanisms: (a) reverting newly transformed cells to normal phenotype; (b) blocking the action of tumor promoting agents; and (c) stimulating the host's immunity. We are planning to develop an *in vitro* and *in vivo* models to evaluate the role of vitamins in the prevention of tumor.

The objective, current and planned activities of our Center are described on a separate sheet. We are sponsoring a symposium on Vitamins, Nutrition, and Cancer in June (see brochure).

At this time we are facing a critical shortage of funds to support our current activities. We need a support of \$150,000 per year for a period of three years. Your financial support will allow us to collect sufficient data which will help us in securing Federal grants for the Center. If you need any additional information, please let me know.

Sincerely,

Kedar N. Prasad, Ph.D.
Professor

KP/lms